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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/777,899	02/07/2001	Kazuyuki Kanazashi	100353-00040	4761

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EXAMINER

BLOUNT, STEVEN

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 06/16/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/777,899

**Applicant(s)**

KANAZASHI, KAZUYUKI

**Examiner**

Steven Blount

**Art Unit**

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 6/28/01.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6 - 10 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

A. The drawings are objected to because in figure 7, SW0 should be able to switch between positions a and b in conformance with what is stated on page 9, lines 35+ of the specification. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent,

except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1 is rejected under 35 U.S.C. 102(e) as being unpatentable over U.S. patent 6,509,851 to Clark et al.

With regard to claim 1, Clark et al teaches a circuit for converting serial data to parallel data (see title) by having an address signal in the "WR\_COL" signal (col 4 line 1) address the data shifting unit 120 (FIFO memory; compare the series of flip flops 142/144 in figure 4 of Clark et al with the series of flip flops FF in figure 7 of the application) wherein the shifting unit is comprised of columns and the data is shifted throughout the columns. Clark et al also teaches the selection unit 118 which generates the WR\_COL signal as described in col 3 lines 2+, wherein the column selected by the selecting unit via the WR\_COL signal is the place where the data is "inputted to said data shifting unit through the input column", as described in col 3 lines 66+.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 3, and 6 - 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 6,509,851 to Clark et al.

With respect to claim 2, Clark et al teach the invention as described above, including using word lengths of 2, 4, or 8 bits (col 4 lines 41+). As shown in figure 4,

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there are 8 parallel lines shown. Since  $2^{(n=2)}-1$  equals 3, and there are (at least) 3 columns shown, it would be obvious to associate the 2 lines with the 3 columns in light of the portions of Clark et al cited above.

With regard to claim 3, see col 3 lines 58+ which discuss the generation of signals SEL0 - SELn.

With regard to claim 6, the destination of the bits is determined by the WR-COL signal as described in col 3 lines 65+.

With regard to claim 7, note that in col 3 lines 40+ it is stated that "each row of the circuit 120" may comprise a column decode circuit 146, wherein member 146 is essentially acting as a switch as described in col 3 lines 58+.

5. Claims 8 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicants admitted prior art (AAPA) in view of U.S. patent 6,509,851 to Clark et al.

With regard to claim 8, applicants admitted prior art teaches semiconductor devices (page 1 lines 18+) which have series to parallel converters as shown in figure 1 (see page 1 line 25) including a data shifting unit 120 with a plurality of columns; and states that the problem with the prior art device is that it needs to include a large number of switches and is complicated (page 3 lines 5 – 30), but does not teach a selection unit for selecting a column through which the serial data is inputted through the input column. This is taught in Clark et al, as discussed above.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have incorporated the selecting unit of Clark et al into the semiconductor device of AAPA in order to decrease the number of required switches and simplify the design.

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With regard to claim 9, see the discussion of claim 7 above.


With regard to claim 10, see the discussion of claims 1 and 8 above.

6. Claims 4 - 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to include the limitations of the base claim and any intervening claims.

7. Examiner Steven Blount may be reached at 703-305-0319 Monday through Friday between the hours of 9:00 and 5:30.

  
Ajit Patel  
Primary Examiner

SB

  
6/7/04